GREEN (F.)

A NEW EDITION

OF

VOX OCULIS SUBJECTA

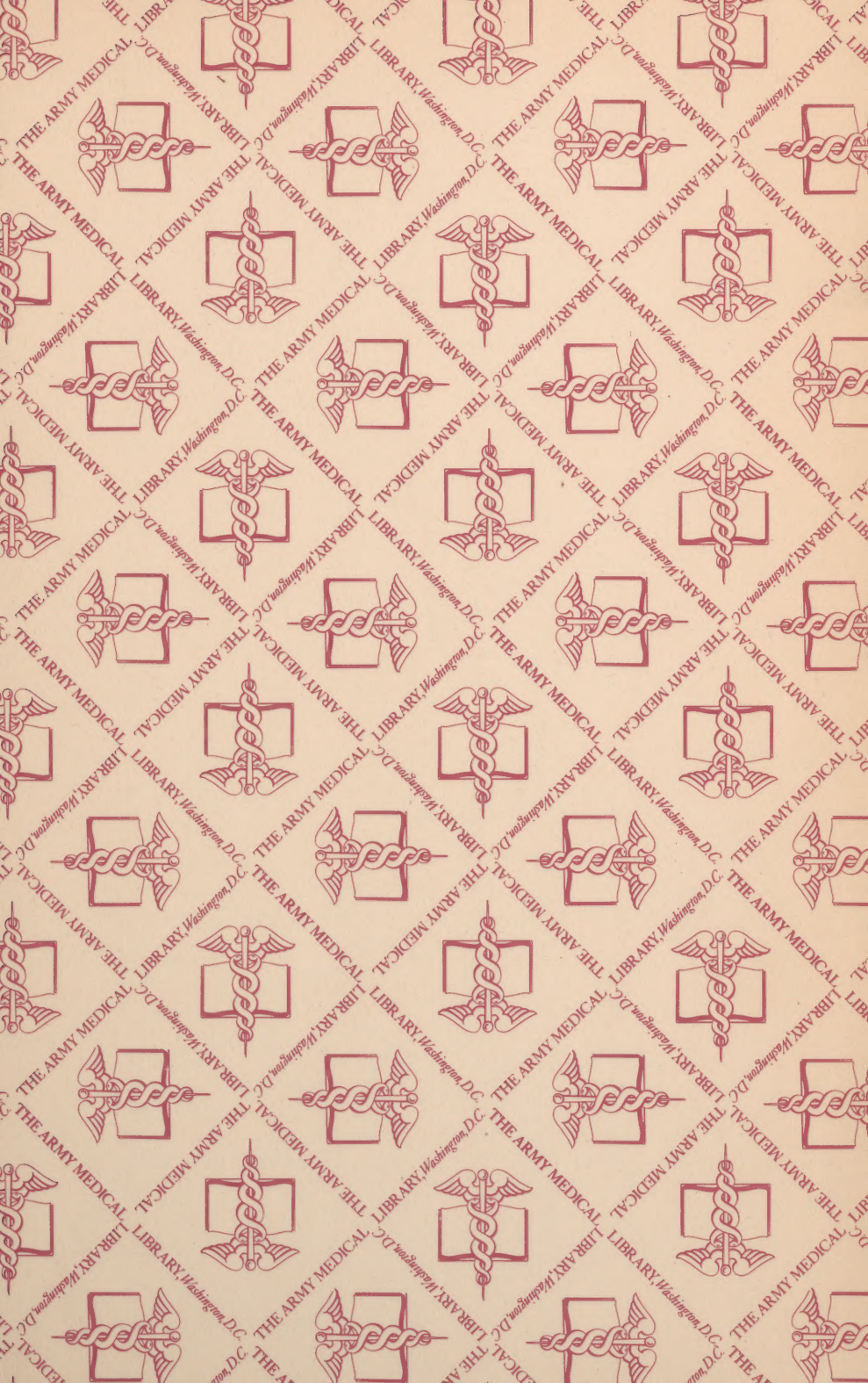
PART I.

A DISSERTATION ON THE MOST CURIOUS AND IMPORTANT ART OF IMPARTING SPEECH AND THE KNOWLEDGE OF LANGUAGE TO THE NATURALLY DEAF AND (CONSEQUENTLY) DUMB

By FRANCIS GREEN

[LONDON, 1783]

PUBLISHED BY
THE BOSTON PARENTS' EDUCATION ASSOCIATION
FOR DEAF CHILDREN
1897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PRESS OF C. W. CALKINS & CO.,
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Boston, Mass.

PREFACE.

"Vox Oculis Subjecta" was the motto of Messrs. Braidwood, at whose school, in Edinburgh, Mr. Francis Green's son received his education, and was adopted as the title of his book on the education of the deaf.

The original work was in three parts, viz.:

"A dissertation on the most curious and important art of imparting Speech and the Knowledge of Language to the naturally Deaf and (consequently) Dumb."

"A particular account of the Academy of Messrs. Braidwood of Edinburgh," and

"A proposal to perpetuate and extend the benefits thereof."

Three copies of *Vox Oculis Subjecta* are still known to be in existence. Harvard College has one; one is in the Boston Public Library, and the Volta Bureau at Washington, D. C., has the third.

The Dissertation contains so much of real value that it has been deemed worthy of rescue from oblivion; although written more than one hundred years ago, it is just as useful now as then, and it is again sent forth on its mission.

This little pamphlet containing the substance of Mr. Green's essay has been prepared especially for circulation among parents of deaf children, and his thoughts alone are presented; numerous quotations contained in the original work being entirely omitted. Slight changes only have been made in the style and phraseology of the essay, it being thought best to make these extracts from the writings of this remarkable man as nearly like the original work as possible.

E. W. E. TOMPSON.

Boston, November 10th, 1897.

FRANCIS GREEN.

The following sketch of the life of Francis Green, author of "Vox Oculis Subjecta," is taken from an article published by Dr. Samuel A. Green, and used with his kind permission.

Francis Green was the earliest American to call public attention in this country to the importance of educating the Deaf and Dumb.

He was born in Boston, August 21st, 1742, and was the son of Benjamin and Margaret (Pierce) Green. He received his early education partly in Halifax, Nova Scotia, and partly at Mr. Lovell's school in Boston, from which he was admitted into Harvard College in the summer of 1756. His collegiate course was only a partial one, as circumstances beyond his control compelled him to take leave at the expiration of his Freshman year. He was allowed, however, to take the bachelor's degree with his class, a favor extended only in extraordinary cases.

The year preceding his entrance into college his father had procured for him an ensign's commission in the 40th Regiment, with the understanding that he should have leave of absence until he should have completed his studies.

In 1757 orders came from the commander-in-chief of the King's forces, that all officers, without regard to rank, should join their respective corps, on account of the war with France. On the reception of this news, he repaired immediately to his regiment at Halifax, with the expectation that his leave of absence would be renewed; but in this he was disappointed.

He now determined to connect his future with that of the army.

In 1765 he went to England, and the next year sold his commission in the army, having honorably served his country nine years.

October 18, 1769, he married his cousin, Susannah, daughter of Joseph and Anna (Pierce) Green.

They had five children, of whom three died in early childhood.

After leaving the army he engaged in mercantile pursuits in his native town.

During the impending revolutionary struggle his sympathies were with the mother country, and he deemed it expedient to quit Boston, which he did, at its evacuation by the British, in March, 1776. He went to Halifax and thence the next year to New York, where he remained till 1780, when he departed for England.

While residing in New York one of his boys was shockingly burned and died in a few hours. Charles and Susannah were the names of his remaining children, and the former was the immediate occasion of his interest in the education of the Deaf and Dumb.

At an early age the child was discovered to be a deaf mute; and in 1780—at that time eight years old—he was placed at the Academy of the Braidwoods in Edinburgh, which had acquired a high reputation as an establishment for instructing such children; and he remained nearly six years. The boy when he was placed there, could not articulate a syllable, nor had he an idea of the signification of a word. With his improvement the father was particularly pleased, and the importance of educating the deaf and dumb made a deep impression on his mind.

In 1783 while residing in London, and while his son was yet at school in Edinburgh, he published a volume entitled: "Vox Oculis Subjecta: A Dissertation on the most curious and important Art of Imparting Speech and the Knowledge of Language to the naturally Deaf and (consequently) Dumb. With a particular Account of the Academy of Messrs. Braidwood, of Edinburgh; and a proposal to perpetuate and extend the Benefits thereof. Written by a Parent. London, 1783." 8vo.

Leaving England in 1784, Mr. Green took up his residence in Halifax, where he lived, filling several important offices; among them that of high sheriff for the county, till 1797.

We next find him at Medford, Massachusetts, where he

appears to have devoted his leisure hours to advocating in journals the importance of educating the deaf and dumb, and endeavoring to enlist public sympathy in their behalf. Some of his articles may be found in the Boston papers, particularly the New England Palladium for the year 1803.

He "translated," as he states in a journal and autobiographical sketch which he left, "the whole of the Abbe de l'Epee's work on the manner of his instructing the deaf and dumb, entitled 'Institution des Sonds et Muets.'" The degree A. M. was conferred upon him in 1790 by Harvard College.

He died at Medford, Massachusetts, April 21st, 1809.

PREFACE TO VOX OCULIS SUBJECTA.

Politics and party views which, at this day, occupy and engross the minds of so many, have no place or share in this unambitious publication; of course, prejudices and resentments on that ground cannot be provoked.

A great part of this essay being obviously either *compilation and quotation, or narrative;* it must necessarily be apparent that literary fame cannot be its object.

It is neither an attempt at composition, nor at criticism; but without ostentation, hath its origin in the *simple* principles of sympathy and philanthropy.

The primary motive is an ardent solicitude that the benefits of an ingenious method, *new* in *extensive* practice if not new in theory, of infinite importance to many individuals, may be universally realized.

Having myself *collaterally* experienced the ineffable satisfaction consequent on its practicability, I am urged by an impatience kindled by social affection, to communicate the consolation to *all* others who may *ever* be in the same predicament.

This although a secondary is not a small inducement.

The editor is not unapprised that several treatises have been published on this art, *in the last century*, by men of distinction in the literary world, viz.: Dr. *Amman* of Amsterdam, Dr. *John Wallis*, and Dr. *William Holder* (by the two former in *Latin*); and also by *Bulwer* in English. They are all now become rare books, and hardly to be met with, as he hath experienced. The subject is also touched upon in a late essay, entitled, "Elements of Speech," by *J. Herries* A. M., 1773.

Extracts from, or translations of, particular parts of each are inserted in the body of this; but neither of them had *alto-*

gether the same grounds nor the same points in view with this. Nor did they flow from the feelings of a parent.

That an art tending effectually to rescue a *certain proportion* of the human species in every age, and in every country, from *idleness*, *ignorance*, and *wretchedness* may be perpetuated, and its benefits happily extended to every possible subject, is, it is conceived, of no trifling consequence to society collectively. To those who are or may be *born* deaf especially, and their immediate connections, it must be deemed invaluable.

If the cultivation of the human mind be the pursuit and end of philosophy; if the salvation of the soul be the use, object and glory of theology, divines and philosophers will at least give credit for the intention, which is always the best apology for the most indifferent performance.

To convince *the world* of the practicability of this extraordinary art *incredible* to many, and to endeavor to prevent its being lost, like many other arts, after having been brought to perfection; to excite the attention of the public to a plan which if the rational nature is superior to the animal, hath objects the most interesting and affecting, is the ultimate design of this publication.

Should this prove the means of *one* only of the human race, in whom "*the particle of the divinity*" is inherent, being raised from an humiliating, most melancholy state by nature, and added to the number of *conversible* and *happy* intellectual beings, not only the application it hath cost will be abundantly compensated for, but the hours expended herein will ever be considered amongst the most usefully employed, as well as the most important and valuable of those bestowed by Providence upon

THE AUTHOR.

March, 1783.

INTRODUCTION TO VOX OCULIS SUBJECTA.

Man as a social being has an irresistible propensity to communicate with his species, to receive the ideas of others, and to impart his own conceptions; this natural disposition for society and conversation is very early apparent in infancy, and as "Nature never gravitates to nought" it hath universally provided the means of fulfilling its dictates (except, perhaps, in the comparatively few instances of idiots); that is, it hath bestowed *capacities* for gradually acquiring all such habits and faculties as are requisite and convenient to us, or conducive to its own purposes. In some, those natural *capacities* or capabilities are complete, in others partial; but, *in all*, they require, like every species of soil, cultivation and improvement.

That mankind are designed for a state of *active* intercourse seems evident from this consideration alone, that every acquisition is progressive and very little of our knowledge is from intuition. Even our most common faculties, although acquired by insensible degrees, are the effect of habit. Every great and valuable end is attainable only by slow degrees; no art or science was ever brought to perfection on a sudden. Nothing exemplifies this position more incontestibly than *language*, emphatically and elegantly defined "The joint energy of our best and noblest faculties, reason and social affection."

The seeds or elements of reason and social affection are connate with us, and inseparable from our constitution as intellectual beings; they spring up, bud, blossom, and bear fruit in *due season*, in proportion to the culture and manure they receive; they manifest themselves, *even in those who have never enjoyed the means and advantages of attaining speech*, as absolutely, though not so copiously, as in other men:—the operations of *their* minds in many instances are demonstrated

beyond the possibility of a doubt—although inexpressible by them *in words*;—but as the pathetic poet, in painting the blessings of language, and the reciprocal enjoyments of conversation and friendship says,

"'Tis speech that ventilates our intellectual fires . . ."

The use, advantage, and necessity of speech, or *articulate language to every individual in a state of society*, are so exceedingly obvious and striking that any farther attempt to illustrate them cannot but be superfluous.

In every station and condition of life, transactions must arise, *even from our natural wants*, to which without this faculty we should in a great degree be incompetent.

What purpose, then, more worthy of humanity than that of providing a remedy for a defect in *many* of our own species, which is so essential an obstruction to their happiness?

DISSERTATION ON THE CURIOUS AND IMPORTANT ART OF IMPARTING LANGUAGE TO THE DEAF.

The catalogue of infirmities and calamities to which human nature is subject, exhibits, perhaps, no case of our fellow-creatures (insanity of mind excepted) that more forcibly, or more justly, excites our commiseration than that of the deaf and dumb.

"No corporeal defect" says a late author on the elements of speech, "renders an individual so uncomfortable to himself and others as that of deafness."

The principal channel through which instruction and knowledge—the sources of infinite pleasure—are usually conveyed to the mind, is the ear. This, by some internal, unaccountable misformation or derangement (of their organs of hearing) is blocked up forever! to them all nature wears a solemn silence; the consequence is that speech, that mark of humanity that peculiar ornament and dignity which chiefly distinguishes man from the brute creation, is unattainable in the common way, it being evidently, by the imitation of the sounds which we hear, that mankind ordinarily acquire the art, or the faculty of speech. In the midst of multitudes, they may be said to be in solitude.

Whenever we meet a person—although an entire stranger—in this unhappy predicament, or reflect on the melancholy situation of such as were born deaf, and remain consequently dumb, does not our sensibility receive a shock which is too violent and complicated to admit of description? Excluded from the knowledge of everything, except the immediate objects of sense, apparently doomed to ignorance, idleness, and uselessness, a burden to their friends, and to society, incapable in such a state, of that social intercourse and communica-

tion of mind which constitute the most pleasing and rational enjoyment of intellectual beings, without distinct ideas of moral obligation, of their duty to God, or the nature and end of their existence; what pitiable animals are men in such circumstances, and how little superior to the brutes! The mind flies off with pain, if not with horror, from the affecting idea.

After the consideration of their deplorable case, what pleasure must the benevolent heart receive from the information that whatever may have been the former fate of such persons, all such may now be rescued from their miserable condition, and enabled to become not only happy and useful, but even learned members of society; for Providence, in infinite mercy, hath been pleased to point out a method, by which they may be taught, in effect to hear, and in reality to speak and read; to attain such a perfect knowledge of language, as, by observing the motion of the mouth in others, to converse intelligibly *viva voce;* to express their own sentiments not only distinctly, but elegantly in writing, and even in process of time, to translate one language into another; consequently to learn arithmetic, geography, mathematics and any other art or science (practical music excepted); but above all, to have a thorough knowledge of the dignifying principles of morality and vital religion.

It is remarkable, notwithstanding all that had been written by Plato, Aristotle, Dionisius the Halicarnassian, Quinctilian, and others of the ancients, who have investigated the principles of language and the formation of the vocal and articulate sounds, that until about the middle of the last century we know of no attempts having been made in this extraordinary art, and at that time only in a few instances; it existed then indeed chiefly in theory. There were, however, some instances of successful practice.

Let us consider the cause of the want of speech in those who are deaf and dumb, and also their natural capacities compared with man's capacity in general; persuaded that a little reflection on those points will be sufficient to convince the most incredulous that there is not, in the nature of things, any physical impossibility in teaching such to converse intelligibly, as

many, who have not thought upon the subject, are apt to imagine.

The dumb (in general), are not so from a deficiency in the organs of speech; the sole cause of their misfortune is a deviation of nature, in the construction of that intricate and most unintelligible part of the human frame, the organs of hearing.

This part is acknowledged by all anatomists to be so complicated, so prodigiously nice in its formation, that their knowledge of its nature, of the peculiar uses of the respective component particles, and of the operations of sound, are very imperfect compared with their knowledge of the other parts of our wonderful machine.

The results of all their dissections and their researches into the principles of this sense, and its organs, amounts to little more than ascertaining the positions of the various internal parts, without being able to agree in accounting for the conveyance of the impressions of sound: the auditory nerve is doubtless the most immediate, essential instrument of the sense of hearing, but the various avenues to it are so marvellously intricate, that the most minute impediment in either may render it inaccessible to sound.

The tympanum, or cover to the whole of the interior ear, is the first portal of admission,—if I may so express it—on the due tension and condition of which any further entrance greatly depends; the use of this is principally to guard the auditory nerve, brain and inward parts of the ear, from outward injury by cold, dust, etc., and hath been, not unaptly compared by some to glass windows, being pervious to sound, as those to light; that this is its principle use, hath been proved by experiment upon animals, who after the tympanum was broken, did not hear the worse for some considerable time, that is, until some other causes, such as cold, impaired the parts within; but for passage of sound to the auditory nerve, by which the sense is conveyed to the brain, it is requisite that this membrane be hard stretched, otherwise the laxness will deaden or damp the sound; to preserve this due tension is the use of the malleus particularly, which being fixed to a distensible muscle, stretches the surface of the tympanum in the

centre, and by drawing it inward, transforms it from a plane to a conoid, within the same circumference; and so keeps it in due order. The want of this tension, from the misformation, or straining of those extremely delicate parts—often times, no doubt, by the convulsive motions before birth—is, perhaps, the most frequent cause of want of hearing, although many causes are assignable, and it is for this reason that some deaf persons hear speech a little, when a drum beats near them, or when in a carriage running on pavement, that do not hear at all at other times; because the violent percussion of the air beats in the tympanum to a suitable degree, as wind fills and expands the sails of a ship, which otherwise hang loose and flaccid.

The causes, however, of deafness, both natural and adventitious, may be as various as the numerous respective minute parts on which hearing depends, and being internal, and not to be investigated by sight, it is not always possible to determine precisely where the defect lies, nor indeed, if it were, by reason of its inaccessibleness, to remedy it.

Neither is it within the compass of the present design to treat fully on the sense of hearing; but only to touch upon the subject so far as might be necessary for some to understand how easily that part of the bodily system is disordered, and in order to lead the mind to attend to the important consequences thereof.

Be the cause of want of hearing natural, or by subsequent accident, what it may, the certain effect is destitution or privation of the common faculty of speech. Being dumb is only the consequence of being deaf, not an independent defect, nor owing to any infallible sympathy of the nerves of hearing and those of the tongue, as Montaigne and many of the ancients supposed. Many have remained dumb who were not born deaf, but who have lost their hearing in infancy, before they had acquired speech, for indeed we are all born dumb, that is, speechless, for a time. The loss of hearing also at any age will in time incur the loss of speech, either totally or partially.

The capacities for attaining oral, or spoken language, besides the sense of hearing, are competent powers of mind, the voice, and the common organs of speech. Now in healthy per-

sons usually called dumb, there is no defect in either of these capacities, but the difficulty hath always been to invent or create a substitute for that sense (hearing) by which others are enabled to imitate sounds made significant by compact, or words. This difficulty hath been, until lately—for so I call the last century—deemed insuperable, but experience hath at last evinced the contrary. Let us take a summary view of those capacities just mentioned, in their order. First the powers of the mind, or soul. These are all comprised in the ability to perceive, and to will: and of perception and volition all language is only a representation.

The other senses of seeing, feeling, tasting, and smelling enable men to perceive and distinguish space, solidity, figure, extension, motion, duration, succession, color, etc., as well as all substances, and their qualities, although they know not their articulate forms or names, if naturally without hearing. It follows then, that, when reason "that Heaven-lighted lamp" is given, the power to compare, compound, enlarge, and abstract, consequently the inclination to examine, measure, compute, choose or refuse, approve or disapprove, must be the necessary effect. Who will not allow, that naturally deaf persons are curiously inquisitive and observant; and as capable as any others of distinguishing hardness from softness, motion from rest, unity from numbers, order from irregularity, beauty from deformity, smiles from frowns, grief from joy, sweetness from bitterness, and in short (excepting those of sounds) all painful sensations from pleasurable? Who will deny, when they invariably, from the dictates of their own minds, or from the example and representation of others, avoid or decline whatever is or may be hurtful, disgustful, or ugly and unpleasing; and cheerfully seek, embrace and prefer what hath a rational probability of being innocent, agreeable and eligible; that they manifest, as clearly as hearing men, the powers of perception, both by sensation and reflection, and of volition; which comprehend all the leading powers of the soul.

The generality of the world are apt suddenly, but mistakenly to combine the idea of idiotism with that of the state of the deaf and dumb, whereas no greater error can subsist, as may

plainly appear by the instances of perfection to which many have arrived in language, and other arts, as well as in the sciences. The truth is, that the scale of intellectual comprehensions, or understandings, in them, is as variously graduated as in other persons; many of them indeed possess a quickness of apprehension, a scope of imagination and sagacity, above the common standard among those who are not naturally deaf.

The voice is the next requisite; the source and fountain of this are the lungs, which it is well known, are the primary efficient cause of respiration or breathing; voice is only breath made sonorous in its passage through the wind-pipe, by the contraction of that interior part of the larynx called the glottis, which is a small chink of a gristly tremulous substance, peculiarly fitted for the production of sound by the vibration of air upon its sides, and through its orifice, which are capable of such extension and contraction, firmness or relaxation, as may be necessary for effecting the different vocal sounds.

None of these parts on which the voice depends have necessarily any immediate connection with the organs of hearing, consequently, they may be perfect, while those are imperfect, and dumb men may have as good voices, naturally, as any other persons; the fact is, that they not only have, but that they use them also; although very uncouthly and without articulation until instructed. Such children also cry and laugh, exactly as all other children do.

The organs of speech are the only remaining necessary qualifications.

It is by the various positions and actions of these that articulation is effected; therefore they are all essentially requisite in oral language; every impulse of voice receiving its particular modification, or alteration, from those different positions.

They are too well known to need description; every one having these organs in proper proportion, viz: tongue, lips, lower jaw, teeth, gums, palate, uvula and nostrils, is capable of effecting all the configurations that produce the elementary sounds; which any one may very easily convince himself of, only by running over with the voice, the alphabet, and observing the different action of these organs respectively.

A complete set of these instruments, in perfect symmetry, is generally found to be possessed by the dumb:—for their want of speech, as hath been before asserted, doth not proceed from any impediment herein, but merely from want of hearing.

And here it is impossible in reflecting upon the infinite wisdom and contrivance manifested in the construction of these organs of speech, and those of hearing, not to be struck with astonishment and realize that "The hand that made us is divine, so fearfully and wonderfully are we made."

Having now as proposed, cursorily considered the powers of the mind, the voice and the organs of speech, and observed that the predicament in which the dumb in general are, doth not result from any deficiency in either of those capacities, it may clearly be inferred that where that is the case if any substitute for the sense of hearing can be adopted, the faculty or art of communication by speech may be acquired by them, although with greater application and difficulty, and longer perseverance than by those who, their ears being perfect, are enabled to regulate and modulate their voices, by imitation, according to their perception of sounds.

It is by the respective nerves of each sense that the several perceptions of all their objects are conducted to the brain; hearing by the auditory nerve, seeing by the optic, tasting by those of the tongue and palate, smelling by the olfactory and feeling by the *genus nervosum* or nervous system, which pervades and overspreads the whole structure of the body. If by the optic nerve, a perception can be conveyed to the brain, which shall virtually excite the same idea in the soul as that excited by the conveyance of the auditory nerve, the first and principal step is gained; which is to understand the meaning of a word or words, by the form, instead of the sound.

The signification of words in general is merely arbitrary, there being no analogy or natural resemblance of the sounds to the thing signified, for instance, *horse*, *man*, *ball*, *bat*, *cow*, *etc.* It is by repeating the sounds, and pointing out the object to children universally, that they come by degrees to understand what those sounds signify. By the same method, *mutatis mutandis*, changing sounds for forms, may children without

hearing, be taught to know the names and qualities of everything animate and inanimate, and understand them when uttered or written, which is the foundation of all language whatever. " It is true that the forms of words, even in writing or print, are not likenesses of the things they are made to represent, any more than sounds are, but they are as much so; and are found more completely convenient for the purposes of language, than absolute pictures, or hieroglyphics; but this relates only to written not oral language. Words, however, have a form in utterance, as well as in characters, and this form is, by habit, discernible to the eye. Of some words much more so undoubtedly than others; for example, how easily may the form of the word "*paw*" be perceived; that is, the position and action of the organs in forming it. It is the effect of only compressing the lips very closely, then letting fall the lower jaw and lip, at the same time breathing strongly (so strongly as to make the vocal sound).

Thus far respects only the means of knowing what may be uttered by others without hearing them, but how shall a deaf person himself pronounce or express these sounds which he hath never heard? Here the assistance of another sense besides that of sight offers itself, and is greatly conducive to this happy effect. I mean feeling, which is said to be the universal sense, the most necessary and to which all the others indeed, may be reduced, because by the tact the impressions of all objects are made on their respective organs. Of the use of feeling in this case some farther description shall be given in the course of this attempt.

Wherever nature has denied or withheld one of the five senses, she has kindly compensated by an uncommon degree of perfection in the others. The extraordinary vigilance of those senses in possession is very obvious in all such instances. Thus the blind are good musicians and mathematicians, and as such are capable of forming just ideas, by sound and touch of the motion, figure, size, and distance of objects, their numbers, and relative proportions. Now may it not easily be credited, that such blind persons have a perfect notion of many machines; such as wheel-carriages, by feeling and handling the different parts? Can they not also determine by the

sounds they make when passing over a hard surface, not only the distance, but the course and velocity of such passing carriages, although this be the proper province of vision? This faculty, however, it must be noticed, is the result of habit and repeated observation.

As thus we find the sense of hearing, aided by the touch, or sense of feeling, can in some instances do the duty of the eye, so we shall be convinced that the sense of seeing, with the same assistance, can do as much for the ear.

From the supposed universality of speech and the seeming facility with which it is gradually acquired in childhood, even by the most ignorant and uninstructed in society, we are apt to consider language as born with us, like the senses, or rather not to consider it at all. The organs of speech are as necessary for choosing, preparing and conducting animal sustenance to the stomach, as for articulation, and those are the first and indeed only natural uses of them, strictly speaking; the latter is artificial. By articulation I do not mean the utterance or production of the mere vocal sounds; but the expression of syllables, or words composed of consonants and vowels.

Speech is with every individual of the human race a gradual acquisition; we are all mute at first, or when nature pushes us upon this theatre of life, although endowed with capacities and dispositions for learning this and other arts. At our birth, and for a long time after, have we any more language than any irrational animal? Are we not, as we come from the hands of nature, a "*mutum pecus*"; a mute herd, as Horace truly calls us? As no man, whatever might be his genius, was ever an artist at once, or complete master of any art or faculty by intuition, or nature—that is, without instruction, or imitation of others, who had by a long succession of experiments and practice, begun and completed the system; so, neither was ever a child born with the faculty of speech.

Articulation, or sounds formed into words of meaning is therefore certainly not natural to mankind, but entirely the effect of art; this art hath been from rude beginnings brought to its present degree of perfection, in a succession of ages in proportion to the multiplication of arts, and always keeping pace with the progress of refinements in society.

There is no such thing as an universal language, unless we allow inarticulate cries (or sounds), and gestures (or signs) to be language; and in that sense, the brutes may be said to have a language as well as mankind.

If articulate language were natural to man, must it not follow that the same would be common to every nation, and spoken spontaneously by all of the same species, having the organs of pronunciation; and of course, that persons born deaf would have it as perfectly as any?—for they have all faculties that others enjoy from nature, and what in that case should hinder their possession of this?

It is intellect or abilities of reasoning and imitation, with the powers of imagination, which form the exalted and distinguishing prerogative of human nature, and these, as was before observed, are not wanting in persons born deaf, although language always is,—that is without peculiar instruction—a capacity also of acquiring every faculty or art except music and oratory—which is a species of music—with all the necessary means of pronunciation nature hath absolutely, although under great disadvantages indeed, bestowed on them; but, by want of the perception of sounds, they are exactly in the same state, with respect to speech, which we may suppose any persons would be in, who were shut up, and bred together, from earliest infancy in a place and manner which should render it impossible for them to hear any language spoken; that is, without speech.

Was Adam speechless? Had he any example by the imitation of which he acquired language, to enable him to give names to every living creature or to answer the voice of the Lord in the garden of Eden? If Adam had this faculty by nature, why not his heirs and successors when they arrive at the state of maturity?

To this it is replied, that many learned and pious divines have agreed, that the metaphorical style so much in use in the East, and with which the Holy Scriptures of the Old Testament abound, may account for this: they have accordingly been of opinion that it is figurative expression not strictly historical, in the same manner as in the same chapter, the Immaterial Omniscient Spirit or First Cause, is said to have brought

every living creature unto Adam to see what he would call them; and as the serpent's language to Eve, together with many other similar instances, more especially the following: "And it repented the Lord that he had made man on the earth; and it grieved him at the heart," which they think, strictly speaking—and so do I—cannot be possible. Allowing, however, the former, respecting Adam's giving names to the animals, to be strictly historical, the objection is removable in another way; for we may well suppose and believe, that the Infinite Wisdom and Goodness might by a miraculous exertion of the same Almighty Power, which gave the first man existence, also qualify him for the state he was in, by imparting to him intuitively such a degree of language as was necessary to his unprecedented artless and innocent condition; as the Apostles were instantaneously inspired for a particular occasion, with the gift of "Tongues"—or languages;—but that necessity ceasing, with respect to his posterity, the miraculous gift of speech, without example, might cease also, as it certainly did to the immediate descendants of the Apostles.

But, be these reasonings just or erroneous, whatever might have been Adam's faculties, we know that his offspring do not inherit any such, not only for the reasons already given, respecting infants,—who, let them be born of what parents they may, learn only the language of the people with whom they are brought up—but, because all the wild men who have been found without society, have been found also without speech, of which there are sundry instances; and because we know also, that many savage tribes, who are not absolutely without society—although possessed of very few arts—have at this day such an imperfect system as plainly proves it a progressive acquisition; therefore, it matters not whether Adam had a particular language of articulation, or not *ab initio;* it being evident that the human race have not uniformly and inevitably received this legacy from him.

Having, it is hoped, obviated this scruple, let us proceed,

> "Say first, of God above, or man below
> What can we reason, but from what we know."
>
> —Pope.

How manifest a truth is it "that man differs more from man, than man from beast?" because by that cultivation of his capacities, which is called education, he is, in a manner, metamorphosed into almost another and superior species!

It is supposed by the author of the "Origin and Progress of Language" (a very learned, curious and philosophical work) and the supposition supported with great ingenuity and probability, that mankind have been gradually emerging from a state of barbarism; that they have from being originally wild, savage creatures, been tamed and humanized; and improved by cultivation, and the introduction of the various arts found by experience necessary to society; but that society may have existed for ages before a system of articulate language was invented. In this there is certainly no impossibility, as he says, inasmuch as persons remaining absolutely dumb are known to be capable of living together in society, of communicating in some degree the knowledge of their wants, of carrying on conjointly any sort of business, and of governing and directing.

It, however, doth not appear to me romantic to suppose, with him, that at first, in a state of nature, the substitutes for language were murmuring, inarticulate sounds; that barbarous nations could only express their different passions by different cries, similar to the instances we are acquainted with in the *war-whoop*, the cry of success, and others in practice among the American Indians; that articulation or the dividing by consonants, the continuity of the vocal sounds, was at first very simple.

The vowels which are the first of the elemental sounds, are always uttered with little or no action of the mouth, being nothing else but breath vocalized, by the vibration of the interior parts of the throat, and passing through the organs of the mouth in certain peculiar positions; thus *A* is only breath blown hard, with an open mouth; *O* is sounded in like manner, only by forming the lips into a circle; the other vowels, with little variation are upon the same easy principle. The junction of consonants to these vowels, by a further modification of the several positions and actions of the tongue, teeth, palate, and lips, assisted by the nose and throat more

or less, forms those alterations of the voice, or division of the continuity of vocal sounds, which is properly articulation; without this speech would only be a cluster of vocal cries, with little distinction.

The vowels being the foundation of speech and uttered with so little art, or action of the mouth, is doubtless the reason that among savages, language (if it deserves to be so called) chiefly consists of vowels, for they have not advanced the art to any great degree; they use words like young children who are beginning to speak, without any connectives; they have no syntax, but in lieu thereof a vast variety of tones, and abundance of action. This perhaps hath been, at one time or another, the state of language in all those nations or tribes of mankind, from which the present proud nations of the earth have proceeded. That these uncultivated tribes, and all others, are the offspring of Adam, those who make the before mentioned objection must consequently allow.

The history of man in various ages and countries, and the nature of things, sufficiently prove that the only natural language of our species is a variety of vocal sounds and tones, significant of our wants or desires, accompanied by signs with the head, hand, etc., and the management of the countenance, so as (imperfectly) to express the disposition of mind, and the will. In process of time, those muttering noises have been articulated to such a number as the sensible objects then existing required names for, which names were, it is probable, simply descriptive, at first, of their most striking qualities, or appearances: as children are observed to distinguish animals by their different noises, roarings, or bleatings, before they know the arbitrary appellations of such animals: For instance, *bow wow*, for dog; *baa*, for lamb; *moo*, for cow, and such like. Thus language grew by degrees, on which alterations were grafted, and in proportion to the necessity, variety of words ensued, until by an infinite multiplication of such articulate sounds, method became indispensibly necessary to avoid confusion, to denote qualities, action, time, quantity, connection, and, by "substance, energy and subject" to convey ideas intelligibly.

The method used in teaching those, who are, by nature,

without hearing, to speak, and the progress observable in them, may serve in some measure to confirm this:—they at first use cries, only, or uncouth irregular exertions of voice, with signs, until art, in other words, precept, and example, regulate these sounds:—the first advance is made by an ingenious method of sounding the vowels, as the notes of the gamut are commonly at first learned, without any connection with time, or that arrangement which is called tune. When the five vowels can be distinctly sounded and discriminated, then an easy monosyllable is learned, as *ba*, *be*, *etc.*; for, besides the distinct sound of the vowel, it is only the compression of the lips, before utterance of the vowel, that makes the syllable, *ba* and so on.

Having acquired syllables, of the combination of which the longest word or pollysyllable is made, all words, of course, may be pronounced:—for example, taking first a word of one syllable. Suppose the learner to be perfect in pronouncing *ba*; then by placing the tongue in such a position as to add *t*—which is no more than pressing the top of the tongue close against the upper gum—the word *bat* is formed; thus articulation of one word is learned, in which two out of three letters are consonants. Being perfect in the pronunciation, he next attains the idea, which this form of articulated breath conveys, by having the object or thing itself placed before his eyes, and pointed at; thus he knows the name of *bat*, and when he sees it again, or when the idea of the thing so called occurs to his mind, he knows how to utter its name. He soon easily learns to distinguish persons, as *Charles*, *William*, *John*, by the prepositive pronouns singular, *I*, *you*, *he*, also the words signifying the most common and familiar actions, as *eat*, *drink*, *walk*; next the connection of substantive and attributive or noun and verb, as *I*, (*Charles*) *eat*, *you* (*William*) *drink*, *he* (*John*) *walks*; then, supposing him first to have learned the form, in writing and speech, and the meaning of bread, he composes a complete sentence, as *I eat bread*, and afterwards sentences less simple. This is the natural progress of the art of speech, and whoever will take the pains to attend to the gradual advances therein made, by children in general, cannot fail to observe it.

The chief difference is, that such as hear, make a variety of experiments with their organs of speech, to imitate the sounds they hear before they hit upon the right position to effect it; but, at length, by perseverance, and repeatedly comparing by their ear their own production of sounds with that of others, they arrive at just articulation, generally, however, long before they know the nature of many things whose names they pronounce; beginning usually with those easy words in which the consonants are labials, or formed wholly by the lips, as *Pa pa*, *Ma ma*, etc., whereas those who are void of hearing, learn, or are taught to vocalize and articulate their breath by feeling and seeing instead of by the other sense, and arrive at the knowledge of the connection and import of words and sentences, by inculcation and study of their forms, in characters, and in enunciation, in lieu of the more easy mode, which hearing persons enjoy. The former may be compared to persons who acquire the art of music by rote, or merely by their own imitative powers and endeavors, the latter of those who are taught it by instructors, systematically.

What is the inference from the preceding propositions? The inference intended is, that the only natural language, already described, may be methodized and formed into a practicable, intelligible system, by all possessed of understanding and of the instruments of voice and articulation.

Taking for granted, that it will be allowed, with respect to those who are blessed with the usual important sense of hearing, it remains only to be proved that it is practicable and intelligible likewise by the deaf. Is it incredible that, a person void of hearing, may by feeling the vibration, or efficient cause of vocal sounds in the throat, inwardly and by application of the touch outwardly, in contradistinction to the mere impulses of breath, learn by perseverance and assistance to know when he gives the different tremulous motions of the air, which we distinguish by the vocal sounds *a*, *e*, *i*, *o*, *u*? Is it incredible that such a person afterwards by attentively looking at others when speaking, and by seeing how they place their lips and transpose their tongue, occasionally to the teeth, gums, and palate, for the combination of consonants and vowels, should learn in time to imitate the pronunciation of all the

various syllables which immediately compose words, and eventually language?

All words are modified undulations of air, made significant to the mind, by social compact, or consent. The first step to language is to form them, the next to comprehend their meaning.

It hath been already premised that vowels are the fundamentals, and expressed with little or no action of the loquelary organs, like separate simple notes in a flute, independent of time, flats, sharps, rests, etc. That when these are learned, by the method just hinted at, articulation of the most easy syllables is next to be inculcated, showing the form in writing, as well as in utterance at the same time; thus bringing the pupil gradually on from syllables to words; from words to sentences, first simple, then compound, until he becomes capable of every kind of composition.

It may well be supposed, that the method of instructing such deaf persons must be extremely tedious and laborious to the teacher, and the greatest possible trial of his patience; but it is the purpose of this essay to prove that it hath been reduced to practice, and that it is practised with great success at present, rather than to attempt to describe particularly the ingenious mode in use.

If a person can be brought to speak at all, and is not deficient in intellect, application and perseverance in a judicious method may enable him, most undoubtedly, to make vast improvements in the faculty of speech: this is demonstrated in the removal of the most violent impediments of stammerers. The greatest orator of Greece was at first almost an unintelligible stutterer; by long labor, and indefatigable perseverance, he overcame all difficulties, and in spite of nature became the paragon of eloquence. His soliloquizing on the sea-coast, near the roaring surges, with pebbles in his mouth (if true) strongly supports the argument that the use of articulate language is not only not natural, but slowly progressive, and of difficult acquisition, although it may be attained, by right application and long practice, even under the greatest disadvantages.

"*Labor omnia vincit.*"

THE BOSTON PARENTS' EDUCATION ASSOCIATION

will present to the City of Boston a Tablet in memory of FRANCIS GREEN, the first to advocate the education of the deaf in this country, on the afternoon of Wednesday, November 10th, at the Horace Mann School Building, at three o'clock.

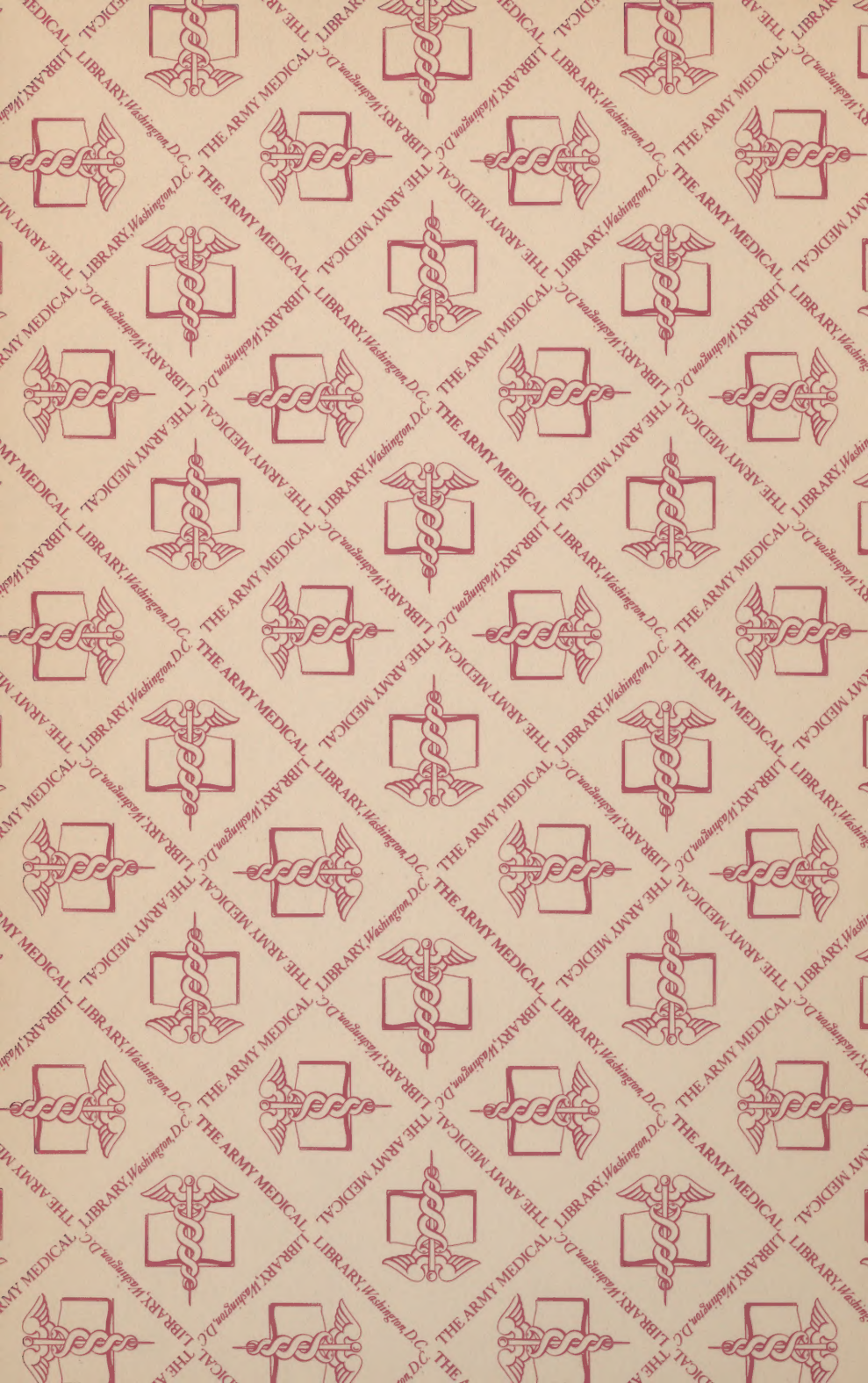
Dr. Alexander Graham Bell will make an address on that occasion.

You are cordially invited to be present.

In behalf of the Association,

E. W. E. TOMPSON,
President.

November, 1897.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